

CONSTRUCTION VALUE ENGINEERING CONCEPT PROPOSAL
MISSOURI DEPARTMENT OF TRANSPORTATION

Contract ID 100122-411 Date 04/27/2010
County Jackson Route 50 Job No. J4P2211
Contractor Emery Sapp & Sons, Inc. Original Bid Cost \$5,149,136.98
Designed By MoDOT By Bridget McPartland
Phone (816) 223-1642
VECP 10-54

1. Description of existing requirements and proposed change(s). Advantages/Disadvantages

Existing design calls for 12" thick Rock Base with Pipe Aggregate Underdrains (Rock base is not daylighted). Proposed changes would increase depth of Rock Base to 18" thick and daylight the Rock Base to both median and outside slopes via 12" X 12" French Drain. This change would allow the Pipe Aggregate underdrains to be eliminated.

2. Estimate of reduction in construction costs.

\$71,549.20

3. Prediction of any effects the proposed change(s) will have on other department costs, such as maintenance and operations.

No estimate changes in other department costs. Increased depth of Rock Base would result in a more stable base which could result in longer pavement life and decreased maintenance costs. Elimination of the Pipe Aggregate Underdrains would eliminate any future maintenance costs as well.

4. Anticipated date for submittal of detailed change(s) of items required by Section 104.6 of the Specifications.

05/03/2010

(date)

5. Deadline for issuing a change order to obtain maximum cost reduction, noting the effect of contract completion time or delivery schedule.

05/03/2010

(date)

Grading operations only have a few days left till completion

(effect)

6. Dates of any previous or concurrent submission of the same proposal.

n/a

(date and/or dates)



EMERY SAPP & SONS, INC.

140 Walnut St.
Kansas City, MO 64106

O: 816.221.3500

F: 816.421.9333

April 26, 2010

2602 N. Stadium Blvd.

Columbia, MO 65202

O: 573.445.8331

F: 573.445.0266

5350 E. State Hwy. AA

Springfield, MO 65803

O: 417.833.9915

F: 417.833.9981

Mr. Thomas Markway
Resident Engineer
Missouri Dept. of Transportation
Stadium Project Office
9400 E. 43rd St.
Kansas City, MO 64133

RE: Value Engineering Proposal 1 Revised;
Route 50 Jackson County;
Job No. J4P2211

Mr. Markway:

Please review the attached Value Engineering Concept Proposal. In addition to the information shown on the attached proposal, the following is a summary of the affected bid items.

Under-runs

0190	6051018A	Pipe Aggregate Pavement Cross Drain	300	LF	\$8.80	=	\$ 2,640.00
0200	6053030A	Pipe Aggregate Pavement Edge Drain	20,373	LF	\$4.85	=	\$ 98,809.05
0210	6054020	Outlet Pipes and Splash Pads	75	EA	\$580.00	=	\$ 43,500.00

Total Under-run \$ 144,949.05

Over-runs

0030	2031000	Class A Excavation	4,932	CY	\$ 2.85	=	\$ 14,056.20
0040	2032000	Class C Excavation	2,614	CY	\$12.00	=	\$ 31,368.00
		12 X 12 French Drain (2,250 LF)	75	EA	\$375.00	=	\$ 28,125.00

Total Over-run \$ 73,549.20

Net reduction in construction costs = \$71,399.85

If you need any additional information, please don't hesitate to give us a call.

Sincerely,

Bridget McPartland
Project Manager
Emery Sapp & Sons, Inc.

Additional Comments:

**** Portion Below This Line To Be Filled Out by MoDOT ****

Comments:

RECOMMEND APPROVAL

Thomas J. Murphy
Submitted By Resident Engineer

5/10/10
Date

Comments: UPON REVIEW OF THE REVISED TYPICAL PROVIDING A 12" SOIL CAP OVER THE ROCK IN SLOPES, I ACCEPT THEIR PROPOSAL.

☒ Approval
☒ Recommended
☐ Rejection
☐ Recommended

Elizabeth A. Velt (PTN)
District Engineer

6/4/10
Date

Comments:

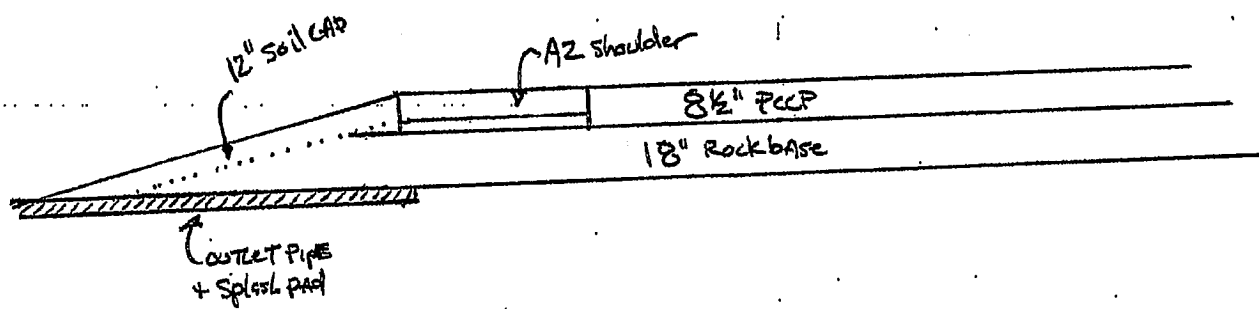
A PROVED PER DISTRICT RECOMMENDATION

☐ Approval
☒ Rejection

David D. Anderson by JYS
State Operations Engineer

6/8/10
Date

Distribution: Resident Engineer, District Operations Engineer, State Operations Engineer
*Value Engineering Administrator - *MoDOT, P.O. Box 270, Jefferson City, MO 65102



CONSTRUCTION VALUE ENGINEERING CONCEPT PROPOSAL
MISSOURI DEPARTMENT OF TRANSPORTATION

Date 03/19/2010

Contract ID 100122-411

Job No. J4P2211

County Jackson

Route 50

Original Bid Cost \$5,149,136.98

Contractor Emery Sapp & Sons, Inc.

By Bridget McPartland

Designed By MoDOT

Phone (816) 221-3500

1. Description of existing requirements and proposed change(s). Advantages/Disadvantages

Existing design calls for 12" thick Rock Base with Pipe Aggregate Underdrains (Rock Base is not daylighted). Proposed changes would increase depth of Rock Base to 18" thick and daylight the Rock Base to both median and outside slopes. This change would allow the Pipe Aggregate Underdrains to be eliminated.

2. Estimate of reduction in construction costs.

\$99,524.85

3. Prediction of any effects the proposed change(s) will have on other department costs, such as maintenance and operations.

No estimated changes in other department costs. Increased depth of Rock Base would result in a more stable base which could result in longer pavement life and decreased maintenance costs. Elimination of the Pipe Aggregate Underdrains would eliminate any future maintenance costs as well.

4. Anticipated date for submittal of detailed change(s) of items required by Section 104.6 of the Specifications.

04/05/2010

(date)

5. Deadline for issuing a change order to obtain maximum cost reduction, noting the effect of contract completion time or delivery schedule.

04/30/2010

(date)

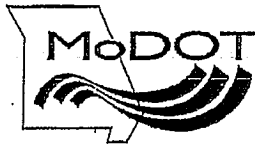
Grading Operations scheduled to begin

(effect)

6. Dates of any previous or concurrent submission of the same proposal.

n/a

(date and/or dates)



MEMORANDUM

Missouri Department of Transportation
District 4 Construction
Stadium Project Office

TO: Perry Allen

FROM: Tom Markway, P.E. *gpc*
Resident Engineer

DATE: April 2, 2010

SUBJECT: Value Engineering Concept Proposal
Job No.: J4P2211
Contract Id: (100122-411)
Route 50, Jackson County

Attached please find the Value Engineering Proposal and supporting documentation for your review and signature.

I recommend denying this proposal.

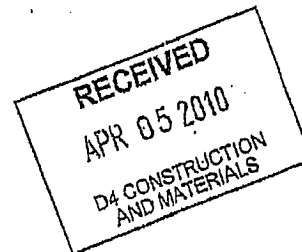
If there are any questions, please advise.

dh

Enclosures

Copy: Project File

J:\DOCS\Active Projects\J4U1130D\CO Memo



Additional Comments:

**** Portion Below This Line To Be Filled Out by MoDOT ****

Comments:


Submitted By Resident Engineer

4/2/10
Date

Comments:

☐ Approval
Recommended

☐ Rejection
Recommended

District Engineer

Date

Comments:

☐ Approval

☐ Rejection

State Operations Engineer

Date

Distribution: Resident Engineer, District Operations Engineer, State Operations Engineer
*Value Engineering Administrator - *MoDOT, P.O. Box 270, Jefferson City, MO 65102



EMERY SAPP & SONS, INC.

140 Walnut St.
Kansas City, MO 64106
O: 816.221.3500
F: 816.421.2833
March 24, 2010

2602 N. Stadium Blvd.
Columbia, MO 65202
O: 573.445.8331
F: 573.445.0266

5350 E. State Hwy. AA
Springfield, MO 65803
O: 417.833.9915
F: 417.833.9981

Mr. Thomas Markway
Resident Engineer
Missouri Dept. of Transportation
Stadium Project Office
9400 E. 43rd St.
Kansas City, MO 64133

RE: Value Engineering Proposal 1;
Route 50 Jackson County;
Job No. J4P2211

Mr. Markway:

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Total Under-run \$ 144,949.05

Over-runs

0030	2031000	Class A Excavation	4,932	CY	\$ 2.85	=	\$ 14,056.20
0040	2032000	Class C Excavation	2,614	CY	\$12.00	=	\$ 31,368.00

Total Over-run \$ 45,424.20

Net reduction in construction costs = \$99,524.85

If you need any additional information, please don't hesitate to give us a call.

Sincerely,

Bridget McPartland
Project Manager
Emery Sapp & Sons, Inc.

Mark A Stock/D4/MODOT

04/02/2010 10:55 AM

To Richard W Orr/D4/MODOT@MODOT

cc Billy G Billings/D4/MODOT@MODOT, Thomas J
Markway/D4/MODOT@MODOT

bcc

Subject Re: Fw: Scanned image from Stadium Project Office

I concur with Rick's assessment. Not only does it pose the possibility of compromising the safety of motorists & is less than visually appealing, bottom line, grass grows in rock (come take a look at the gravel drive at my house) and not only is it difficult to mow such area, doing so often results in 'MTOs' (mower thrown objects) that often result in damage to passing vehicles. Vegetation control via herbicide is not a realistic option either as MoDOT does not maintain sufficient equipment to take care of current needs - without adding to the list.

Mark Stock
MoDOT Area Engineer
Jackson & Cass Counties
(816) 622-0519
mark.stock@modot.mo.gov

Richard W Orr/D4/MODOT

Richard W Orr/D4/MODOT

04/01/2010 10:39 AM

To Thomas J Markway/D4/MODOT@MODOT

cc Mark A Stock/D4/MODOT@MODOT, Billy G
Billings/D4/MODOT@MODOT

Subject Re: Fw: Scanned image from Stadium Project Office

Tom,

I guess I would really like to defer to Mark on that issue. I understand we had some issues with a similar VE proposal to daylight aggregate (not necessarily Type 5 Base) on a recent Route 291 job. It didn't turn out well.

Even if Mark didn't have a preference from a safety point of view, there might be maintenance issues later with it being an eyesore. Unless we have an overwhelming reason for changing it, I would prefer not to extend any base to daylight in the ditch.

Rick

Richard W. Orr, P.E.
Transportation Project Manager
Missouri Department of Transportation
(816) 622-0460
Richard.Orr@modot.mo.gov

Thomas J Markway---04/01/2010 06:57:18 AM---Rick, the contractor has submitted a VE to daylight out the

Thomas J
Markway/D4/MODOT
04/01/2010 06:57 AM

To Richard W Orr/D4/MODOT@MODOT, Mark A
Stock/D4/MODOT@MODOT

cc

This option was looked at during the design process and was eliminated due to safety considerations concerning having rock of this size within the clear zone. The decision was made by District 4 a few years ago, to no longer daylight rock within the clear zone thus, resulting in the current design of installing the rock base to the edge of the shoulder and placing dirt from the edge of shoulder to the toe of the slope. In addition, edge drains were designed to allow drainage of the rock base. Based on these reasons, I recommend rejecting this value engineering proposal.

In addition, the contractor has asked about the possibility of capping the rock with a smaller drainable base such as a Type 5 Base. MoDOT maintenance forces are not in favor of allowing this option either due to the possibility of mowers throwing this rock into passing vehicles. The rock eventually grows grass that needs to be mowed along the edge of pavement.

Thomas J. Spurling 4/2/10

VALUE ENGINEERING CHECK SHEET

TYPE OF WORK

(Check one that applies)

- ☐ Bridge/Structure/Footings
- ☐ Drainage Structures (RCP, RCB, CMP's, ect.)
- ☐ TCP/MOT
- ☒ Paving (PCCP, ect.)
- ☐ Grading/MSE Walls
- ☐ Signal/Lighting/ITS
- ☐ Misc. _____

SUMMARY OF PROPOSAL

(If needed, condense summary to a couple of lines)

_____ Use 18" rock base in lieu of 12" rock base to eliminate pipe aggregate underdrains.

SCANNING OF DOCUMENT

If the proposal is large, please mark or make note, which pages need to be scanned into the database. If there are special instructions, make note of them here.

_____ Scan proposal only.
